



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/863,181

05/23/2001

William A. Cox

CWL-101-A

9646

7590

07/06/2006

Andrew R. Baslie
Young & Baslie, P.C.
Suite 624
3001 West Big Beaver Road
Troy, MI 48084

EXAMINER

PETERSON, KENNETH E

ART UNIT

PAPER NUMBER

3724

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/863,181	Applicant(s) COX, WILLIAM A.	
	Examiner Kenneth E. Peterson	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-13,15-17,37,39 and 40,46-50,52-59 is/are pending in the application.
- 4a) Of the above claim(s) 3-12,37,39,40,46 and 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,13,15-17,47,49,50 and 52-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1,13,15-17,47,49,50 and 52-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1,13,47,58 and 59 all claim a frame having two configurations, and then also claim a die support kit “including interchangeable die supports *for at least one* of the first configurationand second configuration” (emphasis added). The basis for any difference in the frame configurations is based upon the different die supports, but it appears that Applicant is only claiming *at least one* die support set. It is unclear if the second die support set alluded to by the second configuration should be given any weight.

In claim 17, the term “the second modular die support of the die support kit for the high speed mode of operation” lacks proper antecedent basis. Only die supports for the *low speed* mode of operation were previously recited. It is not clear if this term should be given weight because of the “at least one” phrase in the parent claim clearly referring to the *low speed* set.

Claims 54,55 and 57 do not claim the die support kit, but instead merely recite that the die supports are interchangeable. It is not clear which of two ways to interpret;

A) an apparatus that is structurally capable of employing different die support sets, or

B) an apparatus that *has* different die support sets.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,13,16,17,47,49,53,54 and 59, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Gautier '078, who shows a rotary die apparatus having all of the recited limitations including 4 columns (31), a base (12), a cap, a cross member (15), a first die support module having spaced bearings (13) fixed directly to the base (12A), a second die support module having spaced bearings (16), and a pressure device (21,22).

Just like Applicant's device, the bearings (13) provide all of the support in the vertical direction and provide some stability in both horizontal directions.

The die supports are *capable* of being interchanged for high or low speed rotary die applications. They don't suggest doing so, but they are *capable* of doing so, since such devices are inherently built with maintenance in mind. Also, it is difficult to imagine why or how the bearings 44 of the die support would be permanently attached. Thus the die supports could be "interchanged" for duplicates once they wear out. Even though duplicates, they are clearly capable of speeds both above and below 600 linear feet per minute.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,13,16,17,47,49,53,54 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gautier '078.

If it is interpreted that Gautier's die supports are not "interchangeable" or "modules", then Examiner notes that it is old and well known for dies supports to be interchangeable modules. An example of this is the patent to Belongia '461, who shows die support modules (25) that are interchangeable (note removable bolts in figure 3). Additional examples can be provided if needed. It would have been obvious to one of ordinary skill in the art to have modified Gautier by making his die supports be interchangeable modules, as is well known and taught by Belongia, in order to be able to replace them when they wear out.

6. Claims 1,13,15-17,47,49,50 and 52-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gautier '078 (as modified above or not) in view of Keston '116.

In regards to at least claims 15,50,52 and 55-58, Gautier shows a die cutting apparatus with all of the recited limitations except for a set of radial flanges that engage the bearings (13) and the other die. However, it is old and well known for the bearing-die relationship to employ radial flanges to enhance longitudinal stability. An example of this is the patent to Keston, who shows radial flanges (88) on the bearing to prevent longitudinal motion of the rotary die. Additional examples can be provided. This simple teaching is applicable to any parts of the rotating dies, and of course, it is a simple and

obvious reversal of parts to have the radial flange on the die instead of the bearing or to have the flange on one die overlap another die. It would have been obvious to one of ordinary skill in the art to have modified Gautier by adding a radial flange to the dies that could laterally engage the bearings (13,16) and the opposing die, as is generically known and made obvious by Keston, in order to enhance longitudinal stability of the dies and thus make more accurate cuts in the workpiece.

In regards to at least claim 55, Gautier shows a bearing (4,3) that engages the journals (9,10) and appears to be cylindrical, but does not explicitly state that these are "cylindrical roller bearings". Examiner takes Official Notice, and Applicant will agree, that such is well known and ubiquitous. It would have been obvious to one of ordinary skill in the art to have made these bearings be cylindrical roller bearings, since that is the type of bearing that is most common in this type of device. Applicant has not challenged this taking of Official Notice, and it is now considered to be fact.

7. Applicant's arguments have been fully considered but they are not persuasive.

Applicant has overcome the new matter rejection and the rejection under 35 USC 112, 1st paragraph.

Applicant has overcome most of the rejection under 35 USC 112, 2nd paragraph, but the issue of how many die support sets are being claimed is a problem that has been accentuated by the amendments.

Applicant has overcome the problems with the claim titles.

Applicant argues that Gautier does not disclose interchangeable die support sets. This is correct, but Gautier and Belongia do show the capability of having interchangeable die support sets, and Gautier does disclose *at least one* die support set. Applicant's arguments against the prior art are largely moot in view of the issues of scope indefiniteness.


The use of "kit" language in some of the claims is a good idea, but is only useful if Applicant positively claims the various parts of the kit in a manner that they distinguish from each other. More to the point, the modular die supports for *both* the high speed and low speed configurations need to be positively claimed (as opposed to claiming *at least one*). Also, the structure unique to each die support set should be claimed for each set.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken Peterson whose telephone number is 571-272-4512. The examiner can normally be reached Mon-Thurs, 7:30AM-5PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KP
June 30, 2006



KENNETH E. PETERSON
PRIMARY EXAMINER